



### **ELSEVIER**

# **AUTHOR INDEX**

Abdalla, E.K., 513 Aleman, A., 33 Alfonsi, M., 822 Alsarrai, M., 363 Anagnastopoulos, A., 33

Badin, J., 374 Balducci, L., 264 Balkissoon, J., 382 Bardet, E., 822 Barranger, E., 394 Barrett, J., 47 Bassily, N., 374 Batara, J.F., 635 Bauer, J., 363 Becker, K.F., 465 Beer, D.G., 476 Berger, M.S., 659 Bergerot, P., 822 Bethge, W.A., 68 Beutler, T., 374 Bilir, S.P., 827 Birke, M.G., 282 Bishop, M.R., 37, 56 Bonenkamp, J.J., 542 Bourhis, J., 822 Bradley, K.A., 693 Branigan, T., 374 Brenner, B., 554 Brockstein, B., 786 Brown, A., 487 Brown, P.D., 702 Buckner, J.C., 593

Calais, G., 822 Cassal, R., 363 Champlin, R.E., 22 Chan, A.T.C., 794 Childs, R., 47 Chmura, S.J., 816 Chow, L.W.C., 298 Chung, D., 338 Cody, H.S. III, 311 Cohen, H.J., 149 Cohen, E.E.W., 755 Corry, J., 802 Cox, C.E., 324 Crew, K.D., 450

Dan, A.G., 374 Darai, E., 394 David, D., 374 DeAngelis, L.M., 684 Denduluri, N., 137 Desprez, B., 822 Duhaime, L., 363 Ellis, T.L., 653 Enzinger, P.C., 206 Ershler, W.B., 137

Fanucchi, M., 809 Fowler, D.H., 56

Gardner, M., 318, 324 Gershenwald, J.E., 415 Gilbert, M.R., 618 Gillani, A.A., 220 Gillison, M.L., 744 Giralt, S., 33 Giuliano, A.E., 426 Giuliano, R., 318, 363 Goguen, L.A., 778 Goyal, A., 304 Grandis, J.R., 734 Gress, R.E., 56 Grossman, S.A., 635 Grunberg, S.M., 220 Gustin, D.M., 769

Höfler, H., 465 Haddad, R.I., 778 Hainaut, P., 498 Haraf, D.J., 816 Hasina, R., 718 Hormigo, A., 684 Howman-Giles, R., 338 Huang, D.P., 794

Ilson, D.H., 554

Jakub, J., 318, 363 Jakub, J.W., 324 James, C.D., 595 Johnson, D.S., 403

Keles, G.E., 659 Kelsen, D.P., 441 Kemeny, M.M., 175 Khouri, I.F., 22 Khuri, F.R., 809 Kimmick, G., 234 Kitagawa, Y., 409 Kitajima, M., 409 Krammer, P.H., 90 Kwak, L.W., 37 Kwong, A., 298

Laack, N.N., 702 Lam, C.K., 298 Lambert, R., 498 Lapeyre, M., 822 Law, M., 298 Lesser, G.J., 653 Lichtman, M.A., 185 Lichtman, S.M., 160 Lin, J., 476 Lingen, M.W., 717, 718 List, M.A., 827 Longo, D.L., 125, 198 Luciani, A., 264

Macdonald, J.S., 566
MacDonald, T.J., 666
Mahadevan, A., 778
Mansel, R.E., 304
Matsutani, M., 676
Matulonis, U.A., 274
Mayer, R.J., 206
McKnight, T.R., 605
Mehrotra, B., 83
Mehta, M.P., 693
Milano, M.T., 816
Minsky, B.D., 554
Morecki, S., 4
Muss, H.B., 125, 234

Neelapu, S.S., 37 Neugut, A.I., 450 Ng, P., 374 Norris, C.M., 778

Or, R., 4 Ott, K., 530

Packer, R.J., 666 Parkin, D.M., 498 Pendas, S., 318, 324, 363 Pippas, A.W., 324 Pisters, P.W.T., 513 Pomerantz, R.G., 734 Posner, M.R., 778 Posther, K.E., 426

Quan, M.L., 311

Raghavan, D., 249
Rai, K.R., 83
Rao, A.V., 149
Rao, R.D., 595
Rasgon, B.M., 382
Reintgen, D., 297, 363
Reintgen, D.S., 318, 324
Resnick, I., 4
Rhein, B., 822
Ries, L.A.G., 128
Rischin, D., 802
Rives, M., 822
Robinson, S., 27
Rood, B.R., 666
Rosseau, D.L. Jr., 415





### **ELSEVIER**

# **AUTHOR INDEX**

Abdalla, E.K., 513 Aleman, A., 33 Alfonsi, M., 822 Alsarrai, M., 363 Anagnastopoulos, A., 33

Badin, J., 374 Balducci, L., 264 Balkissoon, J., 382 Bardet, E., 822 Barranger, E., 394 Barrett, J., 47 Bassily, N., 374 Batara, J.F., 635 Bauer, J., 363 Becker, K.F., 465 Beer, D.G., 476 Berger, M.S., 659 Bergerot, P., 822 Bethge, W.A., 68 Beutler, T., 374 Bilir, S.P., 827 Birke, M.G., 282 Bishop, M.R., 37, 56 Bonenkamp, J.J., 542 Bourhis, J., 822 Bradley, K.A., 693 Branigan, T., 374 Brenner, B., 554 Brockstein, B., 786 Brown, A., 487 Brown, P.D., 702 Buckner, J.C., 593

Calais, G., 822 Cassal, R., 363 Champlin, R.E., 22 Chan, A.T.C., 794 Childs, R., 47 Chmura, S.J., 816 Chow, L.W.C., 298 Chung, D., 338 Cody, H.S. III, 311 Cohen, H.J., 149 Cohen, E.E.W., 755 Corry, J., 802 Cox, C.E., 324 Crew, K.D., 450

Dan, A.G., 374 Darai, E., 394 David, D., 374 DeAngelis, L.M., 684 Denduluri, N., 137 Desprez, B., 822 Duhaime, L., 363 Ellis, T.L., 653 Enzinger, P.C., 206 Ershler, W.B., 137

Fanucchi, M., 809 Fowler, D.H., 56

Gardner, M., 318, 324 Gershenwald, J.E., 415 Gilbert, M.R., 618 Gillani, A.A., 220 Gillison, M.L., 744 Giralt, S., 33 Giuliano, A.E., 426 Giuliano, R., 318, 363 Goguen, L.A., 778 Goyal, A., 304 Grandis, J.R., 734 Gress, R.E., 56 Grossman, S.A., 635 Grunberg, S.M., 220 Gustin, D.M., 769

Höfler, H., 465 Haddad, R.I., 778 Hainaut, P., 498 Haraf, D.J., 816 Hasina, R., 718 Hormigo, A., 684 Howman-Giles, R., 338 Huang, D.P., 794

Ilson, D.H., 554

Jakub, J., 318, 363 Jakub, J.W., 324 James, C.D., 595 Johnson, D.S., 403

Keles, G.E., 659 Kelsen, D.P., 441 Kemeny, M.M., 175 Khouri, I.F., 22 Khuri, F.R., 809 Kimmick, G., 234 Kitagawa, Y., 409 Kitajima, M., 409 Krammer, P.H., 90 Kwak, L.W., 37 Kwong, A., 298

Laack, N.N., 702 Lam, C.K., 298 Lambert, R., 498 Lapeyre, M., 822 Law, M., 298 Lesser, G.J., 653 Lichtman, M.A., 185 Lichtman, S.M., 160 Lin, J., 476 Lingen, M.W., 717, 718 List, M.A., 827 Longo, D.L., 125, 198 Luciani, A., 264

Macdonald, J.S., 566
MacDonald, T.J., 666
Mahadevan, A., 778
Mansel, R.E., 304
Matsutani, M., 676
Matulonis, U.A., 274
Mayer, R.J., 206
McKnight, T.R., 605
Mehrotra, B., 83
Mehta, M.P., 693
Milano, M.T., 816
Minsky, B.D., 554
Morecki, S., 4
Muss, H.B., 125, 234

Neelapu, S.S., 37 Neugut, A.I., 450 Ng, P., 374 Norris, C.M., 778

Or, R., 4 Ott, K., 530

Packer, R.J., 666 Parkin, D.M., 498 Pendas, S., 318, 324, 363 Pippas, A.W., 324 Pisters, P.W.T., 513 Pomerantz, R.G., 734 Posner, M.R., 778 Posther, K.E., 426

Quan, M.L., 311

Raghavan, D., 249
Rai, K.R., 83
Rao, A.V., 149
Rao, R.D., 595
Rasgon, B.M., 382
Reintgen, D., 297, 363
Reintgen, D.S., 318, 324
Resnick, I., 4
Rhein, B., 822
Ries, L.A.G., 128
Rischin, D., 802
Rives, M., 822
Robinson, S., 27
Rood, B.R., 666
Rosseau, D.L. Jr., 415

Rowe, J.M., 185 Rusch, V.W., 444

Saha, S., 374 Sandmaier, B.M., 68 Sarbia, M., 465 Schmitz, N., 27 Schochet, E., 374 Schulze-Bergkamen, H., 90 Schwartz, G.K., 574 Schweitzer, L., 382 See, S.J., 618 Seo, P.H., 149 Shah, M.A., 574 Shaheen, N.J., 487 Shapira, M.Y., 4

Sire, C., 822 Skinner, E., 249

Slavin, S., 1, 4 Spitz, M.R., 726 Srinivasan, R., 47

Stanton, C.A., 653 Starz, H., 357 Stieber, V.W., 653

Sturgis, E.M., 726 Sullivan, C., 778 Sureda, A., 27 Swor, G., 318, 363

Tatter, S.B., 653 Teo, P.M.L., 794 Thompson, J.F., 338, 349 Tishler, R.B., 778 Tortochaux, J., 822

Uren, R.F., 338, 349

van den Bent, M.J., 645 Vokes, E.E., 717, 786

Wasil, T., 83 Weber, W.A., 530 Wei, Q., 726 Weiss, L., 4 Westin, E.H., 198 Wiese, D., 374 Wilke, L.G., 333, 426 Wirth, L., 778 Wong, J.H., 403

Yancik, R., 128

# SUBJECT INDEX

Shaw, E.G., 653

Shivers, S., 363

Absolute neutrophil count, 10

ABT-627, 630

Abuse, of elderly, 291-292

ABX-EGF, 737, 738-739

Accutane, 630

Acetaldehyde, 501

Acetylaspartate, in brain tumors, 610

Achalasia, esophageal squamous cell carcinoma and, 488

ACOSOG Z0010, 430-432

ACOSOG Z0011, 432-434

Actinium 225, 70

Acute myeloid leukemia

age-dependent cellular abnormalities in, 188-191

age-specific incidence rates of, 187 cell biochemical features in, 190

cell hierarchical features in, 190-191

cytogenetics in, 188-189, 191

gene alterations in, 189-190

newer approaches in, of elderly, 194

survival rates in, by age, 194

therapy results of, in elderly, 193-194 treatment approaches in, 191-193

treatment variables in, of elderly, 191

Adenine nucleotide translocator, 98

Adenocarcinoma

of gastric cardia, 483-484

of gastroesophageal junction, 444-445

genetic changes in, 477

Lauren's classification of, 467-468

Adenoma, definition of, 471

Adenomatous polyposis coli, 480

Adenomatous polyposis coli gene, 473

Adjuvant chemotherapy

in localized gastric cancer, 566-567

phase III trials of, 639

principles of, 637

Administration of Aging, 289

Adult Protective Service Agencies, 292

Advance directives, 277-278, 285-286

AFP, germ cell tumors and, 678-679

After Mapping of the Axilla: Radiotherapy or Surgery trial, 305-307

AG1478, 600

Age

as cancer risk factor, 264, 266

sentinel lymph node and, 325

upper gastrointestinal malignancies and, 457

Age-standardized rate, definiton of, 130-131

Ageism, 125

Aging

cancer and, 265

cellular v organismal, 138

chemotherapy and, 160

competing cancer mortality risks and, 156-157

familial cancer and, 264

immunity and, 141-142

increased cancer incidence with, 142-143

lymphoma incidence and, 199

multiple primary malignancies and, 264-266

normal, 137 segmental, 198

theories of, 138-141

tumor progression and, 143-144

in US population, 128-129, 132

Akt, 96-97

Alanine, in brain tumor, 612

Alcohol consumption

esophageal squamous cell carcinoma and, 455, 488

head and neck cancer and, 728

upper gastrointestinal malignancies and, 457

Aldehyde-dehydrogenase enzyme, 501

ALDH-2, 501

Alemtuzumab, 85-87

pretransplant, 34-35

Allogeneic bone marrow transplantation, graft-versus-malignancy effect following, 47-48

Allogeneic cell therapy, experimental basis for, 5-6

Allogeneic cellular immune effector, 53

Allogeneic transplantation, in Hodgkin's disease, 28-29

Alloreactive donor lymphocyte, with conventional stem cell transplanta-

ALMANAC trial, 304-306

AMAROS trial, 305-307

American College of Surgeons Oncology Group Z0010, 315

American Joint Commission on Cancer staging system, revised, 420-422

American Joint Committee on Cancer 2002, for melanoma staging, 416-

American Joint Committee on Cancer Sixth Edition staging system, 312

American Joint Committee on Cancer TNM staging system, for esophageal cancer, 514-516

American Society of Anesthesiologists' classification, of anesthetic risk, 175-176

Anal cancer, aging and, 214-215

Anaplastic astrocytoma, 622 biologic therapy clinical trials in, 630

biologic therapy in, 629 brachytherapy for, 625-626 clinical presentation of, 618

diagnostic imaging of, 618-619

histologic diagnosis of, 619-620

monitoring of, 621-622

neoadjuvant chemotherapy for, 628

obtaining tissue in, 619

prognostic indicators for, 620-621

radiation therapy for, 624-625

recurrent, response rates in, 638 stereotactic radiosurgery for, 625-626

surgery for, 622-624 survival following, 640

Anastrozole, 240

Aneuploidy, 720

esophageal adenocarcinoma and, 480

in gastroesophageal junction adenocarcinoma, 447

Angiogenesis, 599, 601, 760-762

ANT-2, 98-99

Anti-reflux intervention, 458

Anti-S100, 357, 358

Anti-T-lymphocyte globulin, 10

Antibody therapy, targeted, 68-69

Antibody-directed cellular cytoxicity, 68

Antigen, tumor-associated, 53 Antigen-presenting cell, 57

Antimony sulfur colloid, 319

Antioxidants, upper gastrointestinal malignancies and, 457

Antisense therapy, 109, 740-741

AP-1, 102

Apaf-1, 95, 100, 106

APC gene/Wnt signaling pathway, 498

Apoptosis, 90, 103, 479

drug resistance and, 102-105

drug-induced, 101-102

execution of, 93-94

extrinsic death pathway leading to, 90-93

induction of, 109

intrinsic death pathway leading to, 93

pathways of, defects in, 104-105

regulation of, 94-96

RNA interference and, 109

survival signaling and, interference with, 107-108

in tumorigenesis, 96-101

ARF, 97-98

As Low As Reasonably Achieved, 299

Aspirin, upper gastrointestinal malignancies and, 459

ASPP family, 98

Assisted living, 290-291

Astatine 70, 211

Astrocytoma

anaplastic, see Anaplastic astrocytoma

definition of, 595

histologic grading system for, 620

low-grade, 599-600

overview of, 596

ATG. 10

Atrasentan, 630, 641

Attorney, durable powers of, 285-286

Augsburg Consensus, 357-358

Autologous stem cell transplantation, in Hodgkin's disease, 28

Axillary lymph node, standard evaluation of, 312-313

Axillary lymph node dissection, 313

completion, 325-326

Axillary lymph node metastasis, in breast cancer, 316

Axillary Lymphatic Mapping Against Nodal Axillary Clearance trial, 304-306

B-cell non-Hodgkin's lymphoma, monoclonal antibody purging in, 83

Balance, in elderly, 151

Balloon catheter system, 626

Barium esophagram, esophageal squamous cell carcinoma and, 489

Barrett carcinoma, resection in, survival following, 549

Barrett's adenocarcinoma, biological differences in, 447

Barrett's esophagus

diagnosis of, 492, 515-516

endoscopic surveillance of, 492-493

esophageal adenocarcinoma and, 490

gastroesophageal reflux disease and, 454-455

short-segment, 516

Barrett's metapiasia, genetic changes in, 477

Basaloid squamous cell carcinoma, in esophagus, 467

Bay 00-100

BB-251, 630

Bcl-2, 95, 99, 106

Bcl-2 family, 94

BCL2, 479

BEACOPP regimen, 27

Beta-catenin, 479-480, 503

Bevacizumab, 583

BH3-mimetics, 106

Billing, balanced, 286-287

Biomarker, for head and neck cancer chemoprevention, 771

Bismuth 70, 213

Bladder cancer

bladder preservation in, 252

metastatic, 254-255

operative therapy of, in elderly, 251-252

radiotherapy of, in elderly, 252-254

survival in, by age, 253

Bleomycin, 798, 799

dosing of, in renal dysfunction, 163

Bleomycin, mechlorethamine, doxorubicin, vinblastine, vincristine, etoposide, prednisone, granulocyte colony-stimulating factor regi-

Blood, marrow v, in stem cell transplantation, 43

Blood metastasis, in breast cancer, 316

Blood-brain barrier, 628-629

Blue dye technique, 318, 326, 354, 368, 376

BMI, see Body mass index BMP-2, in medulloblastoma, 669

Body mass index

cancer and, 456

sentinel lymph node and, 325

upper gastrointestinal malignancies and, 457

Bone metastasis, in breast cancer, 316

Borrmann's classification, 465-466

Bortezomib, 630, 759-760

Bowman-Birk inhibitor concentrate, 773-774

Brachytherapy in anaplastic astrocytoma, 625-626

interstitial, 626

radiation dose increase via, 559 Brain metastasis(es)

chemotherapy in, 698-699

incidence of, 693

medical management of, 693-694

radiosensitizers and, 697-698

radiosurgery v surgery in, 696-697 radiotherapy recursive partitioning analysis and, 694

stereotactic radiosurgery in, 695-696

surgical resection for, 694-695

therapy comparisons in, 695 whole-brain radiotherapy and, 694, 706

Brain tumor biopsy in, 660 computer-assisted stereotactic resection in, 660 current issues in, 593-594 incidence of, 618, 659 language site identification in, 663 motor cortex identification in, 662-663 neuronavigation and, 660-661 preoperative imaging in, 659-660 prognosis in, and surgery, 663-664 stimulation mapping and, 661-662 subcortical pathway identification in, 662-663 Breast, lymphatic drainage of, 345-346 Breast cancer adjuvant chemotherapy in, 240-242 adjuvant polychemotherapy in, 241 adjuvant radiation therapy in, 238-239 adjuvant therapy in, for women over 70, 242 axillary assessment in, 238 comorbidity in, 236-237 at diagnosis, by age, 235 in elderly, 234-235 female, cross-national mortality due to, 131 life expectancy and, 236-237 local management of, 237-239 location of, 345 lymphatic mapping and, 334-336 lymphoscintigraphy method for, 341 massage of, 326 metastatic, therapy for, in elderly, 243 micrometastasis in, 315-316 mortality from, 235 operative risks in, for elderly, 176-178 radioimmunotherapy in, 72-73 sentinel lymph node technique in, 298-302 sentinel nodes in, 345 screening recommendations for, in elderly, 235 systemic therapy for, in elderly, 239-242 therapy for, in postmenopausal women, 236-237 tumor biology of, in elderly, 235236 tumor progression in, and aging, 144 Breast-conserving therapy, in elderly, 177-178 Breast implant, lymphatic mapping and, 329 Breast reduction mammoplasty, lymphatic mapping and, 329-330 Breslow thickness, 366 Breslow's principle, 359 Bromodeoxyuridine, 697 Bronchoscopy, in esophageal cancer, 518 Bryostatin-1, 758 Busulfan, anti-T-lymphocyte globulin, cyclosporine A, fludarabine regimen, 11 Busulfan, anti-T-lymphocyte globulin, cyclosporine A, fludarabine, cyclo-

phosphamide regimen, 8 C-MYC, 96 C225, 737, 738 CAD, 93 Cag island, 454 Calvert and Chatelut formulae, 162 Campath-1H, 85-87 Cancer ageism and, 125-127 aging and, 265 comorbidity and, 156 elderly survival in, 125-127 end-of-life hydration in, 275-276 immune senescence and, 142 incidence of, in elderly, 128 increased incidence of, and aging, 128, 142-143 tumor progression in, and aging, 143-144

Cancer, body mass index and, 456 Cancer mortality age distribution of, 133 comorbidity and, 153-155 competing risks in, and aging, 156-157 cross-national comparison of, 130-132 in US, 132-133 US age distribution of, 135 Cancer patients, comorbidity in, 153-157 Capacity competency versus, 284 definition of, 283-284 Capecitabine, in elderly, 167 Carbogen, 806 Carboplatin, 824 dosing of, in renal dysfunction, 163 in elderly, 166 in recurrent head and neck cancer, 810 Carboplatin, mitomycin, fluorouracil regimen, 577 Carboplatin, paclitaxel regimen, in esophageal cancer, 577 Carboplatin, vinblastine regimen, in esophageal cancer, 577 Carcinogenesis, interpretations of, 142-143 Cardia adenocarcinoma chromosomal alterations in, 481 classification of, 444-445 genetic changes in, 483 incidence of, 451-452 nomenclature of, 444-445 overview of, 444 Cardia carcinoma distribution of, 453 epidemiologic similarities of, 457 macroscopic appearance of, 466 Siewert classification of, 444-445 Carmustine, dosing of, in renal dysfunction, 163 Carmustine, dexamethasone, etoposide, cytarabine, melphalan regimen, 28 Carmustine, etoposide, cytarabine, melphalan regimen, 28 Carroll depression scale, 152 Caspase-9, 95 activity of, 93-94 Categorically needy, definition of, 289 Catenin complex, 479-480 Cathepsin B, 480 Caucasian race, upper gastrointestinal malignancies and, 457 CC 5013, 630 CCI-779, 630, 641 CCNU for malignant glioma, 627 for oligodendroglioma, 649 CD45, 75, 76 CD52.75 CD95, 94, 98, 102, 103, 104 CDKN1B, 478 CDKN2A, 477-478 Cefitinib, in recurrent head and neck cancer, 812 Celecoxib, 630, 641 Center for Epidemiologic Studies-Depression Scale, 152 Central nervous system, radioimmunotherapy of, 71-72 Cervical cancer, 394-397 Cetuximab, in recurrent head and neck cancer, 812 Chang classification, 669

Charlson index, 155-156 Chemical shift imaging, 606-607

Chemoradiation

lactate-edited three-dimensional, 611, 612

Chemoprevention, definition of, 769

in head and neck cancer, 781-782

in localized gastric cancer, 569

in localized esophageal cancer, 557-559

Chemoradiation (Continued)

postoperative, 788-789

preoperative, in localized esophageal cancer, 559-561

quality of life following, 830-832

radiation dose intensification in, 558-559

sequential, in head and neck cancer, 782-783

in unresectable head and neck cancer, 787-788

Chemotherapy

adjuvant, see Adjuvant chemotherapy

aging and, 160

combination, for gastreoesophageal malignancies, 579

for gastroesophageal malignancies, 579

for glioblastoma multiforme, 637-639

induction, in head and neck cancer, 779-781

in localized esophageal cancer, 556-557

neoadjuvant, and lymphatic mapping, 330-331

oral, in elderly, 167

palliative, in head and neck cancer, 816-817

in recurrent glioblastoma multiforme, 640

reirradiation with, 817-819

up-front, for oligodendroglioma, 650-651

Children's Oncology Group, 682

Chimerism, 12, 50

incomplete, 42

microsatellite marker analysis of, 78

mixed, 56-57

Choline, 607-608

Chromosomal abnormalities, esophageal adenocarcinoma and, 480

Chromosomal region 9p21, 718-719

Chromosome 17p, 598

Chromosome Y, loss of, 477

Chronic myeloid leukemia

age-specific incidence rates of, 188

survival rates in, by age, 194

Cilengitide, 630

Cisplatin, 567, 798, 799, 818

dosing of, in renal dysfunction, 163

in bladder cancer, 254

in elderly, 166

in recurrent head and neck cancer, 809-812

Cisplatin, cytarabine, fludarabine regimen, 23

Cisplatin, docetaxel, fluorouracil regimen, 568, 579

Cisplatin, docetaxel regimen, 568, 581

Cisplatin, epirubicin, fluorouracil regimen, 578, 579-580

Cisplatin, epirubicin, raltitrexed regimen, 576

Cisplatin, etoposide, doxorubicin regimen, 578

Cisplatin, etoposide, epirubicin regimen, 579

Cisplatin, etoposide, fluorouracil, folinic acid regimen, 576

Cisplatin, etoposide regimen, 576

Cisplatin, fluorouracil regimen, 779-780, 576, 579

Cisplatin, fluorouracil, epirubicin regimen, 579

Cisplatin, irinotecan regimen, 568, 576, 581

Cisplatin, paclitaxel, fluorouracil regimen, 576, 581

Cisplatin, paclitaxel regimen, 576

Cisplatin, vinorelbine regimen, 576

Cis-retinoic acid, 630

Cl-1033, 600, 601, 737, 740

Cladribine, 14

Clark level, 366, 417-418

Clock drawing test, 151

Clonal myeloid disease

aging and, 186

definitions of, 185-186

Cobalt 57, 298-299

Cochran's method, 359

Cockayne's syndrome, 139

Cognitive function assessment of, in elderly, 151

COL-3, 630

Collimator, high-resolution, 340

Colloid particles, filtered v unfiltered, 327

Colon cancer

cross-national mortality due to, 131

tumor progression in, and aging, 144

Colorectal cancer

adjuvant therapy of, 209-211

chemotherapy for, by age, 210

incidence of, by age, 206-207

male v female incidence of, 134

operative therapy for, 209

operative treatment of, in elderly, 178-180

screening for, 208-209

treatment of, in elderly, 211

US profile of, 134, 374-375, 403

Community care, 289

Comorbidity index, 155

Competency

capacity versus, 284

definition of, 283

Complete lymph node dissection, following positive sentinel lymph node biopsy, 365-369

Comprehensive geriatric assessment, 149

Computed tomography, in esophageal cancer, 517-518

multidetector, 531

spiral, 530-531

Computer-assisted stereotactic resection, 660

Conditioning

conventional, v pattern of engraftment, 10

reduced-intensity, see Reduced-intensity conditioning

Continuous care facilities, 290

Corticosteroids, for primary CNS lymphoma, 684-685

COX-1, 759

COX-2, 759

inhibitors of, 774

Cranial irradiation, prophylactic, 704-706

Creatine, in brain tumor, 608

CT, see Computed tomography

Cumulative Illness Rating Scale-Geriatrics, 156

Curcumin, 774-775

Custodial care, 291

Cyclin, 476

Cyclin D1, 476-478, 758-759

Cyclin E, 477, 478

Cyclin-dependent kinase, 476

inhibition of, 108

Cyclooxygenase-2, inhibition of, 459

Cyclophosphamide, busulfan regimen, 8

Cyclophospahmide, etoposide, prednisone, vincristine, doxorubicin regimen, 42-43

Cyclophosphamide, fludarabine regimen, 15

Cyclophosphamide, fludarabine, granulocyte colony-stimulating factor, cyclosporine regimen, 50, 52

Cyclophosphamide, rituximab, fludarabine regimen, 23

Cyclophosphamide, total-body irradiation regimen, 8

Cyclosporine A, 8

Cyclosporine A, cyclophosphamide, fludarabine, granulocyte colony-stimulating factor regimen, 50, 52

Cyclosporine A, mycophenolate mofetil regimen, 15

CYP3A4 enzyme, 161

Cyt c, 95

Cytarabine, carmustine, etoposide, melphalan regimen, 28

Cytarabine, cisplatin, fludarabine regimen, 23

Cytarabine, dexamethasone, carmustine, etoposide, melphalan regimen,

Cytarabine, dexamethasone regimen, high-dose, 28

Cytarabine, dosing of, in renal dysfunction, 163

Cytochrome P450, 161

Cytokine storm, 60

D1 dissection, in gastric cancer, 544 D2 dissection, in gastric cancer, 544 Daunorubicin, in elderly, 164-165 Denmark, elderly population segment in, 129-130 Depression in elderly, 151-152 end-of-life, 276 Dexa-BEAM regimen, 28 Dexamethasone, carmustine, etoposide, cytarabine, melphalan regimen, 28 Dexamethasone, high-dose cytarabine regimen, 28 DHAP protocol, 28 Diet head and neck cancer and, 730 upper gastrointestinal malignancies and, 457 Diffuse large cell lymphoma, survival in, 25 Diffuse type carcinoma, 473 Diploid, 720 Disability, definition of, 287-288 DNA array analysis, in gastric cancer, 473 DNA methylation, inhibition of, 108 DNA repair theory, 139, 140 Do-not-resuscitate order, 277-278 Docetaxel, 567 in elderly, 165-166 in gastric cancer, 580-581 in recurrent head and neck cancer, 810, 813, 811 Docetaxel, cisplatin, fluorouracil regimen, 568, 579 Docetaxel, cisplatin regimen, 568, 581 Docetaxel, irinotecan regimen, in esophageal cancer, 577 Donor, matched unrelated v HLA-matched sibling, 12 Donor lymphocyte infusion, 22 allogeneic, 4 graft augmentation of, 61-64 for overt relapse post-stem cell transplantation, 6-7 for relapse prevention, 7-9 Donor Th2 cell, 59 in vitro generation of, 62 Donor Th2 cell graft augmentation, 60-61 Doxorubicin, 567 in elderly, 164-165 liposome-, 165 Doxorubicin, etoposide, cisplatin regimen, 578 Doxorubicin, etoposide, prednisone, vincristine, cyclophospahmide regimen, 42-43 Doxorubicin, fluorouracil, methotrexate regimen, 578 Doxorubicin, fluorouracil, mitomycin regimen, 578 Doxorubicin, mechlorethamine, vinblastine, vincristine, bleomycin, etoposide, prednisone, granulocyte colony-stimulating factor regimen 27 Drug pharmacokinetics, in elderly, 160-162 Drug resistance, 102-104 DTIC, dosing of, in renal dysfunction, 163 Ductal carcinoma-in-situ, lymphatic mapping and, 329 Dysplasia in Barrett's esophagus, macroscopic appearance of, 466 definition of, 469 esophageal glandular, 470-471 esophageal squamous cell, 470 genetic changes in, 477

in Barrett's esophagus, macrosco definition of, 469
esophageal glandular, 470-471
esophageal squamous cell, 470
genetic changes in, 477
histological features of, 469-479
in stomach, 471

E-cadherin, 479-480, 483
E-cadherin gene mutation, 494
E1A, 96
E2F1, 96
Echo time, 607
long, 609, 610
short, 608

EF5, 805 Effective dose for emission, 300 patient, assessment of, 299-300 in sentinel lymph node lymphoscintigraphy, 298 for transmission, 299 EKB-569, 601 Elder law definition of, 282 identifying client in, 283 advanced directives and, 277-278 ageism and, 125-127 cancer care in, and ageism, 125-127 cancer incidence in, 128 comorbid disease in, 153-157 cross-national comparison of, 129-130 drug pharmacokinetics in, 160-162 end-of-life depression in, 276 end-of-life hydration in, 275-276 end-of-life pain in, 274-275 medical conditions in, 150-153 treatment preferences of, 278 US cancer profile in, 134 Elderly abuse, 291-292 Elective lymph node dissection, 369 EMD 121974, 630, 641 EMD 72000, 737, 738 Endometrial cancer, 397-398 Endoscopic mucosal resection, 508-509 Endoscopic mucosal resection-C, 508 Endoscopic mucosal resection-L, 508-509 Endoscopic screening, esophageal adenocarcinoma and, 458-459 Endoscopic ultrasonography in esophageal cancer, 517-518 in esophageal cancer staging, 531-532 in gastric cancer, 521 for regional lymph node involvement, 535-536 Endoscopy, esophageal squamous cell carcinoma and, 489 Epidermal growth factor, 478, 583 Epidermal growth factor receptor, 97, 478, 596-597, 601, 734 inhibitors of, 737 ligands of, 735 overexpression of, 736 signal transduction by, 735 wildtype v mutant, 737 Epigalocatechin gallate, 774-775 Epirubicin, 567, 798 in elderly, 165 Epirubicin, cisplatin, fluorouracil regimen, 578, 580 Epirubicin, cisplatin, raltitrexed regimen, 576 Epirubicin, etoposide, cisplatin regimen, 579 Epithelial-cell adhesion molecule, 72 EPOCH, fludarabine regimen, 59 EPOCH regimen, 42-43 Epstein-Barr virus, head and neck cancer and, 728-729 ErbB1, 478 ErbB2, 478 in medulloblastoma, 668 Erbitux, 737, 738 Erlotinib, 630 Error catastrophe theory, 139, 140 Esophageal adenocarcinoma anueploidy and, 480 Barrett's esophagus and, 490 carcinogenesis pathways for, 454 chromosomal alterations in, 481 distribution of, 453 epidemiologic similarities of, with other malignancies, 457

Esophageal adenocarcinoma (Continued)

epidemiology of, 490

genetic changes in, 477

incidence of, 451, 452, 476

microsatellite instability and, 480

molecular aberrations in, 472-473

natural history of, 491

obesity and, 456

risk factors for, 490-491

screening for, 491-492, 493

staging of, 515-516

Esophageal cancer

by age, 207

age-adjusted incidence in, 451

biological differences in, 446-447

cisplatin-based chemotherapy in, 576

diet and, 455-456

distant metastases detection in, 533-535

endoscopic ultrasonography staging in, 531-532

histological typing of, 466-468

imaging in, 517-518

incidence of, 487, 574

international distribution of, 452

localization of, 465

localized, see Localized esophageal cancer

long-term survival in, 549-550

lymphatic mapping for, 409-410

metastatic, chemotherapy in, 574-577

multidetector CT in, 531

new developments in, 552

non-cisplatin-based chemotherapy in, 577

overview of, 441-443

pathologic considerations in, 450-451

patient aging and, 213-214

PET in, 532, 533

PET response assessment in, 536-538

prevention of, 456-459

resection in, survival following, 549

risk factors for, 453-456

sentinel node concept in, 410

Siewert classification of, 444-445

spiral CT in, 530-531

staging of, 447-448, 469

survival and, 453

TNM staging of, 514

tumor spread in, 468-469

Esophageal glandular dysplasia, 470-471

Esophageal squamous cell carcinoma, 480-482

alcohol consumption and, 455

chromosomal alterations in, 481

distribution of, 452-453

epidemiologic similarities of, with other malignancies, 457

incidence of, 451, 452

macroscopic appearance of, 466

molecular aberrations in, 472

natural history of, 487

risk factors for, 488

screening for, 487-488

staging of, 515-516

tobacco smoking and, 455

Esophageal squamous cell dysplasia, 470

Esophagectomy

complications following, 551

survival following, 551-552

transthoracic v transhiatal, 550-552

Esophagogastric cancer

prevention of, 507-508

treatment knife in, 509

treatment of, 508-509

Esophagogastric cancer (Continued)

Esophagogastric lesion, premalignant, see Premalignant esophagogastric le-

Esophagogram, double-contrast barium, in gastric cancer, 524, 525

Esophagus

adenocarcinoma of, 444-445

small cell carcinoma of, 471

squamous cell carcinoma of, 466-467

Essential person, definition of, 288

Etoposide, in elderly, 166-167

Etoposide, carmustine, cytarabine, melphalan regimen, 28

Etoposide, cisplatin regimen, 576

Etoposide, cisplatin, fluorouracil, folinic acid regimen, 576

Etoposide, dexamethasone, carmustine, cytarabine, melphalan regimen, 28

Etoposide, doxorubicin, cisplatin regimen, 578

Etoposide, epirubicin, cisplatin regimen, 579

Etoposide, folinic acid, fluorouracil regimen, 578

Etoposide, mechlorethamine, doxorubicin, vinblastine, vincristine, bleomycin, prednisone, granulocyte colony-stimulating factor regi-

men, 27

Etoposide, mitomycin regimen, 577

Ex vivo lymphatic mapping, in colorectal cancer, 406-407

Ex vivo mapping technique, 377

Ex vivo ratio, 363

Exfoliative balloon cytology, esophageal carcinoma and, 488-489

Familial cancer, aging and, 264

Fas, 479

Fat clearance technique, 404

Fenretinide, 630

Fibroblast growth factor, 760-761

Fiduciary relationship, definition of, 283

Field cancerization, 735-736, 769-770

Field carcinogenesis, 264-266

Filgrastim, 24, 43

Flavopiridol, 582-583, 758

Florida melar oma trial, 363-369

study design of, 369

FLT3 mutation, 189-190

Fludarabine, 10-11, 14, 42

dosing of, in renal dysfunction, 163-164

in elderly, 163

Fludarabine, busulfan, anti-T-lymphocyte globulin, cyclosporine A regi-

Fludarabine, cyclophosphamide, granulocyte colony-stimulating factor, cyclosporine regimen, 50, 52

Fludarabine, cyclophosphamide regimen, 15

Fludarabine, cyclophosphamide, rituximab regimen, 23

Fludarabine, cytarabine, cisplatin regimen, 23

Fluorescein, 378

Fluorescent in situ hybridization, 600

Fluoropyrimidine, oxaliplatin regimen, 581-582

Fluorouracil, 104, 567, 799, 818, 819

in elderly, 162-163

in recurrent head and neck cancer, 809-810

toxicity of, in elderly, 163

Fluorouracil, carboplatin, mitomycin regimen, 577

Fluorouracil, cisplatin regimen, 576, 579, 779-780

Fluorouracil, cisplatin, etoposide, folinic acid regimen, 576

Fluorouracil, cisplatin, paclitaxel regimen, 576

Fluorouracil, docetaxel, cisplatin regimen, 568, 579

Fluorouracil, doxorubicin, methotrexate regimen, 578

Fluorouracil, doxorubicin, mitomycin regimen, 578

Fluorouracil, epirubicin, cisplatin regimen, 578, 579-580

Fluorouracil, etoposide, folinic acid regimen, 578

Fluorouracil, irinotecan, folinic acid regimen, 568

Fluorouracil, paclitaxel, cisplatin regimen, 581 Folinic acid, cisplatin, etoposide, fluorouracil regimen, 576

Folinic acid, etoposide, fluorouracil regimen, 578

Folinic acid, irinotecan, fluorouracil regimen, 568 Folstein Mini-mental state Examination, 151 Folylpolyglutamate synthase, 102-103 Forkhead transcription factors, 97 France, elderly population segment in, 129-130 Fransenod study, 305, 308 Free radical damage theory, 139, 140 Free radical hypothesis, 139, 140 French Society for Pediatric Oncology, 682 Fresenius AG, 10 Fruits, upper gastrointestinal malignancies and, 457

Function, assessment of, 152 Gait, in elderly, 151 Gallbladder cancer, aging and, 214 Gamma probe, 410 Gastrectomy, D1 v D2, in localized gastric cancer, 566-567 Gastric adenocarcinoma, 482-483 chromosomal alterations in, 481 epidemiology of, 446 international distribution of, 452 precursors of, 471 WHO classification of, 467-468 Gastric body tumor, 521 Gastric cancer operative treatment of, in elderly, 181-182 patient aging and, 213 Gastric cancer age-adjusted incidence in, 451 biological differences in, 446-447 carcinogenesis pathways for, 454 clinical staging in, 520 CT in, 520 D1 dissection in, 545 D2 dissection in, 545-546 distal, 542-546 distribution of, 453 early, 548

endoscopic ultrasonography in, 520-524 endoscopic ultrasonography staging in, 531-532 epidemiology of, 493 following D1 and D2 dissection, 546 gene expression profiles in, 473-474 genetic screening for, 493-494 Helicobacter pylori infection and, 453-454 hepatic metastases of, 521 histological typing of, 466-468 incidence of, 574 intestinal reconstruction in, 547-548 intraperitoneal therapy in, 570 localized, see Localized gastric cancer lymphatic mapping in, 411-412 macroscopic appearance of, 465-466 metastatic, treatment of, 577-582 multidetector CT in, 531 overview of, 441-443 p53 and, 473 palliative chemotherapy in, 578 palliative surgery in, 547 palliative treatment in, 548 pancreatosplenectomy in, 546 pathologic considerations in, 450-451 pathologic staging in, 518-520 predisposing conditions for, 493 risk factors for, 493 salty food and, 456 screening for, 493 screening markers for, 494

Gastric cancer (Continued) screening recommendations for, 494 sentinel lymph node biopsy in, 524 sentinel node concept in, 412 Siewert classification of, 444-445 smoking and, 455 staging of, 447-448, 470 stomach resection in, 546-547 survival and, 453 two-year survival in, 571 Gastric carcinoma macroscopic appearance of, 466 rare types of, 468 TNM classification of, 519 types of, 473 Gastric cardia adenocarcinoma chromosomal alterations in, 481 classification of, 444-445 incidence of, 451-452 nomenclature of, 444-445 overview of, 444 Gastric cardia carcinoma distribution of, 453 epidemiologic similarities of, 457 macroscopic appearance of, 466 Siewert classification of, 444-445 Gastroesophageal junction cancers at, 524-526

Gastric noncardia carcinoma, 457 resection in, survival following, 549 Gastroesophageal junction adenocarcinoma biological differences in, 446

classification of, 444-445 clinical differences of, and staging, 447-448 cytogenetic studies in, 447 epidemiology of, 445-446 incidence of, 451 nodal metastases of, and site involved, 448 nomenclature of, 444-445 overview of, 444 pathologic considerations in, 450-451 Siewert classification of, 444-445, 515 treatment of, 448-449 Gastroesophageal junction carcinoma, 548-549

macroscopic appearance of, 466 precursors of, 471 staging of, 470 Gastroesophageal reflux disease Barrett's esophagus and, 454-455 laryngeal cancer and, 729-730 premalignant esophagogastric lesions and, 501 upper gastrointestinal malignancies and, 457 Gastrointestinal cancer, skip metastasis in, 409 Gastrointestinal system, radioimmunotherapy of, 72 Gastroscopy, premalignant esophagogastric lesions and, 505-506 Gefitinib, 630, 641, 774 in elderly, 162

Gemcitabine in recurrent head and neck cancer, 811, 811 Gender, upper gastrointestinal malignancies and, 457 Gene expression profiling, 109-110 Genetic changes, in adenocarcinoma, 477 Geographic location, upper gastrointestinal malignancies and, 457 GERD, see Gastroesophageal reflu: disease Geriatric assessment importance of, 149-150 multidimensional screening instrument for, 154 Geriatric Depression Scale, 152 Geriatric syndromes, 150-153

Germ cell tumor(s)

clinical symptoms of, 677-678

histological classification of, 676-677

incidence of, 676

intracranial, phase II-III studies of, 681-682

nongerminomatous, 680-681

radiological findings in, 678

signs of, 677-678

sites of, 677

survival following, and histology, 680

therapeutic classification of, 680

tumor markers in, 678-679

German Clinical Interdisciplinary Sentinel study, 305, 307

Germinoma, 679-680

neurohypophyseal, 677

radiological findings in, 678

Gleevec, 598, 630

Glial tumor, noninvasive diagnosis of, 612-613

Glioblastoma multiforme, 612

adjuvant chemotherapy for, 637

bilateral, 638

chemotherapy for, 637-639

clinical research in, 640-641

incidence of, 635

presentation of, 635-636

radiation for, 637

recurrent, management of, 639-640

response rates in, 638

signal transduction inhibitiors in, 641

supportive care in, 641

surgery for, 636-637

survival following, 640

treatment challenges of, 636

trial designs in, 641

Glioma

definition of, 595

high-grade, 610

low-grade, see Low-grade glioma

malignant, see Malignant glioma

radiotherapy and, 706-708

radiotherapy neurotoxicity and, 707

signaling pathways in, 596

therapeutic planning for, 613-614

Gliosis, radiation-induced, 614

Glutamate, in brain tumor, 611-612

Glutamine, in brain tumor, 611-612

Glutathione-S-transferase M1 null genotype, 447

Glycation, 140

Goldman criteria, for postoperative cardiac complications, 176

Goldman risk categories, 177

Graft rejection

prevention of, 63

T-cell immunity and, 56-57

Graft-versus-Hodgkin's disease effect, 30-31

Graft-versus-host disease, 57-58, 85-87

as type I immune response, 60

incidence of, 25

prophylaxis of, 24

Graft-versus-leukemia effects, 4

in different disease categories, 8

Graft-versus-lymphoma effects, 22

Graft-versus-malignancy effects, following allogeneic bone marrow transplantation, 47-48

Graft-versus-renal cell carcinoma effects, 51-52

Graft-versus-tumor effects, 33-34, 39, 48

renal cell carcinoma and, 49-51

Granulocyte colony-stimulating factor, 760-761

cyclophosphamide, fludarabine, cyclosporine regimen, 50, 52

Granulocyte colony-stimulating factor, mechlorethamine, doxorubicin, vinblastine, vincristine, bleomycin, etoposide, prednisone regimen, 27

Granulocyte-macrophage colony-stimulating factor, 37-38, 760-761

Guardianship, 284-285

GW572016, 737, 740

H-R3, 737, 738

HCG, germ cell tumors and, 678-679

Head and neck

lymph drainage patterns in, 385

lymphatic drainage of, 343

Head and neck cancer

chemopreventive agents in, 772

chemoradiation v induction chemotherapy in, 790

diagnosis of, and human papillomavirus, 750-751

in elderly, 227-229

human papillomavirus in, 745-746

induction chemotherapy in, 779-781

induction chemotherapy plus chemoradiation in, 790-791

organ preservation in, 779-780

pathogenesis in, 746-748

patient priorities in, 832-833

premalignant progression to, 735-736

preoperative lymphoscintigraphy in, 383-385

preoperative symphosemingraphy in, 363-363

prognostic significance in, of human papillomavirus, 748-749

reirradiation in, 817

risk factors for, and human papillomavirus, 748-750

treatment late effects in, 828

unresectable patients with, 780

Head and neck malignancy, esophageal squamous cell carcinoma and, 488

Head and neck squamous cell carcinoma

clinical progression of, 719

early detection in, 721

histopathology progression of, 719

incidence of, 718, 726-727

molecular diagnosis in, 721-722 molecular diagnostics for, 720-721

molecular progression model of, 718-719

mortality from, 727

prevalence of, 727

tobacco exposure and, 727-728

Health care proxy, 285

Hearing impairment, in elderly, 150

Helicobacter pylori, eradication of, 457-458

Helicobacter pylori infection, 508

gastric cancer and, 453-454

premalignant esophagogastric lesions and, 501

upper gastrointestinal malignancies and, 457

Hematologic malignancies, radioimmunotherapy in, 73 Hematoxylin and eosin analysis, 312-313, 324-325

Hepatic metastases, of gastric cancer, 521

Hepatocellular carcinoma, aging and, 214

Hepatocyte growth factor, 760-761

High-dose therapy, in Hodgkin's disease, 28

Histone deacetylase, inhibition of, 108

HMB 45, 357, 358

Hodgkin's disease

autologous stem cell transplantation in, 28

conventional salvage therapy in, 27-28

in elderly, 202

high-dose therapy in, 28

radioimmunotherapy in, 74-75

staging for, 201

survival in, 29-30

Home care, 290 Hospice

definition of, 287

for terminally ill elderly, 278-279

Hot spot, 339

Hsp70, 100

Human antimouse antibodies, 68, 74

Human papillomavirus

in head and neck cancer, 728-729, 745-746

in premalignant lesions, 748

Human papillomavirus infection, esophageal carcinoma and, 488

Hutchinson-Guilford syndrome, 139 Hydration, end-of-life, 275-276

Hydroxyurea, 818, 819

dosing of, in renal dysfunction, 163

in elderly, 168

Hyperbaric oxygen therapy, 806

Hypermethalation, 483

Hypoxia, detection of, 805

Hypoxia-inducible factor 1 alpha, 760

IAP family, 95, 99

IAP proteins, 99

IASPP, 104

IBCSG 23-01, 305-306, 308-309

Idarubicin, in elderly, 165

Idiotype, 37

Idiotype vaccination, 40-41

Ifosfomide, dosing of, in renal dysfunction, 163

Imatinib, 107-108, 582

Imatinib mesylate, 598, 601, 630

Immune senescence, cancer and, 142

Immune theory, 139, 141

Immunity, aging and, 141-142

Immunoablative, 59

Immunoglobulin receptor, 37

Immunohistochemical staining, 404

Immunohistochemistry, 313

Immunosuppression, 14

Immunosuppressive therapy, 24

Immunotherapy, allogeneic, in solid tumors, 48

Immunotoxin, synthesis of, 739

In vivo lymphatic mapping, in colorectal cancer, 405-406

In vivo mapping technique, 375-377

Index of Coexistent Disease, 156

Informed consent, 284

Initiation, definition of, 770

Injection technique, 326-328

Insulated tip knife, 509

Insulin-like growth factor, 760-761

Insurance, Medigap, 287

Interferon, 60

Interferon alfa, adjuvant, for resected stage III melanoma, 364-365

Interleukin, 60, 760-761

Internal mammary node dissection, 328

International Breast Cancer Study Group trial 23-01, 305-306, 308-309

International CNS Germ Cell Tumor Study Group, 681-682

International Commission on Radiological Protection, 299

International Prognostic Index, for non-Hodgkin's lymphoma, 201

International Society of Pediatric Hematology and Oncology, 682

Interstitial brachytherapy, 626

Interval node, 344-345

Intestinal carcinoma, macroscopic appearance of, 466

Intestinal marker, 476

Intestinal type carcinoma, 473

Intradermal technique, 327

Intraparenchymal technique, 327

Intrinsic mutagenesis theory, 139-140

Iodine 131, 70

Ionizing radiation theory, 139, 141

Iressa, 630, 737, 739-740

Irinotecan

in elderly, 164

in gastric cancer, 580-581

Irinotecan, cisplatin regimen, 568, 576, 581

Irinotecan, docetaxel regimen, in esophageal cancer, 577

Irinotecan, folinic acid, fluorouracil regimen, 568

Isolated tumor cells, 311

Isotrentinoin, 772-773

Isotretinoin, 630

Israel, minitransplants in, 2

Italy, elderly population segment in, 129-130

Japan, elderly population segment in, 129-130

Japanese classification, 504

Japanese Pediatric Brain Study Group, 681

Judge, role of, in medical treatment, 285

Kaplan-Feinstein index, 156

Kennedy, MD, Byrl James, 124

Kernohan schema, 620

Keyhole limpet hemocyanin, 38

Kinase, cyclin-dependent, 476 KiSS study, 305, 307

Vnife

in esophagogastric cancer treatment, 509

insulated tip of, 509

Lactate, in brain tumors, 610-611

Language site, identification of, 663

Laparoscopic technique, 377

Laparoscopic ultrasonography, for staging, in gastric cancer, 522, 523

Laparoscopy

in esophageal cancer, 518

for staging, in gastric cancer, 522

Laryngeal cancer

gastroesophageal reflux and, 729-730

incidence of, 726-727

Lauren's classification

of adenocarcinoma, 467-468

diffuse carcinoma according to, 466

of stomach cancer, 503

Law

charge-limit, 286

creation of, 282

Leather bottle stomach, 466

Leukemia

monoclonal antibody purging in, 83-84

radioimmunotherapy in, 75

Life expectancy

cross-national comparison of, 130-132

disease-related mortality and, 157

maximum survival versus, 137-138

Lifestyle modification, esophageal cancer and, 456-457

Lipid, in brain tumors, 611

Liposomal daunorubicin, in elderly, 165

Liposomal doxorubicin, in elderly, 165

Liver cancer, incidence of, by age, 207

Living will, 285 Localized esophageal cancer

adjuvant radiation therapy in, 555

chemoradiation in, 557-559, 561-562

future directions in, 562

optimal surgical procedure in, 554-555

postoperative chemotherapy in, 557

preoperative chemoradiation in, 559-561 preoperative chemotherapy in, 556-557

primary radiation therapy in, 555

surgical resection in, 554

Localized gastric cancer

adjuvant chemotherapy in, 567-569

chemoradiation in, 569

D1 v D2 gastrectomy in, 567

neoadjuvant therapy in, 569-572

Localized gastric cancer (Continued) postoperative adjuvant therapy in, 572 primary curative treatment of, 566-567 Long-term care, definition of, 289 Long-term care facilities, for terminally ill elderly, 279-280 Loss of heterozygosity, 718, 720 Low-grade glioma, 604 age in, and survival, 657, 658 chemotherapy plus radiation for, 655-656 clinical trials for, 656-658 histology of, and survival, 656 radiotherapy dosing for, 654-655 radiotherapy timing for, 654 surgical resection in, 655 survival in, 655 time to neurotoxicity in, 657 tumor size of, and survival, 656 Ludwig trial, 313 Lung cancer cross-national mortality due to, 131 male v female incidence of, 134 tumor progression in, and aging, 144 US profile of, 134 Lutetium 177, 70 LY294002, 600 LY317615, 630 Lye ingestion, 490 esophageal squamous cell carcinoma and, 488 Lymph drainage, 353-354 of anterior trunk, 342-343 of head and neck, 343-344 of lower limb, 344 of posterior trunk, 341-342 previous radiotherapy and, 354 previous surgery and, 354 of skin, 341 of upper limb, 344 Lymph flow, physiology of, 338-339 Lymph flow pattern, by breast quadrant, 347 Lymph node, naming of, of stomach, 543 Lymph node dissection for gastric cancer, 544 therapeutic, 366 Lymphadenectomy selective, 427 three-field, 555 Lymphatic lake, 345 Lymphazurin, 377-378 injection of, 376 Lymphoid neoplasms, World Health Oganziation classification of, 200 Lymphoma incidence of, and aging, 199 treatment of, in elderly, 201-203 Lymphoproliferative disorders, reduced post-transplant, 87 Lymphoscintigram, 390 of head, 384, 387 low- v high-dose radiocolloids and, 389 Lymphoscintigraphy for esophageal cancer, 410 preoperative, in melanoma, 349-352 preoperative anterior, 395 of sentinel lymph node, patient effective dose in, 298-299 timing preoperative, 352 Lymphoscintigraphy method for breast cancer, 341 for melanoma, 340-341

Magnetic resonance imaging

of brain tumors, 605

FLAIR, 690

intraoperative, 661 of medulloblastoma, 667-668 Magnetic resonance spectra, 607 Magnetic resonance spectroscopy, of anaplastic astrocytoma, 618-619 Male gender, upper gastrointestinal malignancies and, 457 Malignant glioma adjuvant chemotherapy for, 627-628 drug access in, 628-629 monoclonal antibodies for, 627 recurrent, chemotherapy for, 628 Malnutrition, in elderly, 150 Mantle cell lymphoma, survival in, 25 Marijuana, head and neck cancer and, 730 Marimastat, 630, 641 Mastectomy, prophylactic, and lymphatic mapping, 329 Mcl-1, 105 Meat, preserved, upper gastrointestinal malignancies and, 457 Mechlorethamine, doxorubicin, vinblastine, vincristine, bleomycin, etoposide, prednisone, granulocyte colony-stimulating factor regimen 27 Mechlorethamine, vincristine, procarbazine, prednisone regimen, 27 Medicaid, 288-289 Medical International Radiation Dose schema, 298 Medically needy, definition of, 289 Medicare + Choice, 287 Medicare, definition of, 286 Medicare Part C, 287 Medigap insurance, 287 Medulloblastoma average-risk, 671 chemotherapy in, 671 clinical presentation of, 666-667 high-risk, 671 incidence of, 666 infant, 671-672 light microscopy of, 668 molecular genetics of, 668-669 neuroimaging of, 667-668 pathology of, 668 radiation therapy in, 670 relapsed, 672 risk stratification in, 669-670 staging of, 669 surgery in, 670 treatment sequelae in, 672-673 Melan A, 357, 358 Melanoma lymphatic mapping and, 333-334 lymphoscintigraphy method for, 340-341 molecular staging of, 365 preoperative lymphoscintigraphy in, 349-352 2002 American Joint Committee on Cancer staging of, 416-419 Melphalan, 14 dexamethasone, carmustine, etoposide, cytarabine regimen, 28 dosing of, in renal dysfunction, 163 Melphalan, carmustine, etoposide, cytarabine regimen, 28 Merkel cell cancer, sentinel lymph node biopsy and, 391 MET, 755-756 Metastasis, skip, 409 Metastat, 630, 641 Methotrexate, 567, 799 dosing of, in renal dysfunction, 163 in elderly, 162 high-dose, plus radiotherapy, in primary CNS lymphoma, 687-688 in recurrent head and neck cancer, 811 tacrolimus regimen, 24 Methotrexate, fluorouracil, doxorubicin regimen, 578

Magnetic resonance imaging (Continued)

Nasopharyngeal carcinoma

adjuvant chemotherapy in, 797-798 concurrent chemoradiation in, 789-800

Micrometastasis Nasopharyngeal carcinoma (Continued) clinical significance of, 313-315 definition of, 311 detection of, 312-313 studies evaluating, 314 to other sites, 315 Micromorphometry, S classification and, 358-359 pathogenesis of, 797 Microsatellite, 480 Microscopic nodal tumor burden, 421-422 Milan trial, 305, 307-308 Necrosis, 623, 90 Mini-BEAM regimen, 28 radiation-induced, 614 Minitransplant, rationale for, 2 recurrent tumor and, 625 Misonidazole, 697 Needle knife, 509 Mitochondria apoptosis and, 102 regulation of, 94-95 resensitizing, 106-107 Neuronavigation, 660-661 stabilization of, 98-99 Mitomycin, 567, 818 Neurotoxicity oral etoposide regimen, 577 uracil, tegafur regimen, 579 Mitomycin, carboplatin, fluorouracil regimen, 577 Mitomycin, fluorouracil, doxorubicin regimen, 578 Nicotinamide, 806 Mitoxantrone, in elderly, 165 NK cell(s), 53, 60, 100 MMP, 102 Mobility, in elderly, 151 Non-Hodgkin's lymphoma Monoclonal antibody(ies) in elderly, 202-203 anti-epidermal growth factor receptor, 737-738 application of, 109 for malignant glioma, 627 staging for, 201 in vitro purging with, 83-84 Non-small cell lung cancer Monoclonal antibody-streptavidin, 70 MOPP regimen, 27 Mortality, comorbidity and, 153-155 Motexafin-gadolinium, 697-698 Motor cortex, identification of, 662-663 MTOR, 756-757 immunoblative, 58-60 MTOR inhibitor, 601 Mucinous adenocarcinoma, 467-468 Multicenter Selective Lymphadenectomy trial, 371-372 in myeloma, 33-35 Multiple myeloma in elderly, 203-204 principles of, 5 nonablative preparative regimens in, 34-35 rationale for, 1-2 nonmyeloablative reduced-intensity transplantation in, 33-35 regimens for, 23 radioimmunotherapy in, 75 stem cell transplantation in, 38-39 Multiple primary malignancies clinical consequences of, 271-272 strategies in, 10 definition of, 267 epidemiology of, and age, 268-270 and, 459 prevalence of, at autopsy, 268 NSABP B-32, 429-430 prostate cancer and, 270-271 Nuclear factor B, 99-100 registry experience with, 268-270 Nursing home care, 291 renal cell carcinoma and, 271 Nutrition research implications of, 271 smoking-related, 270 gastric cancer and, 456 MYC, amplification of, 479 MYCC, in medulloblastoma, 668 Mycophenolate mofetil, 77 plus cyclosporine A, 15 Ocular lymphoma Myeloid neoplasm, World Health Organization classification of, 186 Myeloma, treatment of, in elderly, 203-204 Myo-inositol, in brain tumor, 612 Myol, 612 treatment of, 690 N classification, 418 Oligodendroglioma, 600 N-acetylaspartate, in brain tumors, 610

epidemiology in, 794-795 genetic changes in, 795-796 genetic features of, 796-797 neoadjuvant chemotherapy and concurrent chemoradiation in, 800 neoadjuvant chemotherapy in, 798-799 National Comprehensive Cancer Network staging guidelines, 516 Neck, lymph node basins of, 383 Neural cell adhesion molecule, 72 Neuroendocrine theory, 139, 141 Neuroimaging, of medulloblastoma, 667-668 Neurosurgery, intraoperative imaging in, 660-661 following low-grade glioma radiotherapy, 707 following prophylactic cranial irradiation, 705 NIA-NCI Cancer and Comorbidity Index, 155-156 Nitrosamines, esophageal carcinoma and, 488 International Prognostic Index for, 201 radioimmunotherapy in, 73-74 advanced, treatment of, 223-224 treatment of, and aging, 220-221 Nonmyeloablative stem cell transplantation experimental basis for, 5-6, 77-79 in hematologic malignancies, 9-15 for immunotherapy, of metastatic solid tumors, 15-17 mixed chimerism and, 56-57 preparative regimens for, in lymphoma, 23 renal cell carcinoma and, 50, 51 safer conditioning strategy in, 9 solid tumors and, 49, 52-53 Nonsteroidal anti-inflammatory drugs, upper gastrointestinal malignancies esophageal cancer and, 455 Nutrition Screening Initiative, 150 Obesity, esophageal adenocarcinoma and, 456

chemoradiotherapy complications in, 690-691 chemotherapy complications in, 690 radiotherapy complications in, 690 adjuvant chemotherapy for, 650 anaplastic, 611

chemotherapy for, 649-651

clinical presentation of, 646

Oligodendroglioma, 600 (Continued)

following chromosomal analysis, prognosis in, 647-648

genetic lesions in, 647

high-dose chemotherapy plus autologous bone marrrow rescue for, 650

overview of, 645

pathology of, 646-647

prognosis of, prior to chromosomal analysis, 647

radiological presentation of, 646

radiotherapy for, 648-649

surgery for, 648

treatment initiation in, 648

up-front chemotherapy for, 650-651

ONYX-015, 812

Optical coherence tomography, 538-539

Oral cavity, squamous cell carcinoma of, 387-390

Oral premalignant lesion, 771-772

Organ preservation, in head and neck cancer, 789-790

OS1774, 601, 630, 641

OSI-774, 737, 740

Ovarian cancer

radioimmunotherapy in, 72

US profile of, 134

Oxaliplatin, 581

in elderly, 166

fluoropyrimidine regimen, 581-582

P13K, 96

P16, 476-477, 759

P16 tumor-suppressor gene, 596, 718-719

P50 protein, 100

P52 protein, 100

P53, 101-102, 479, 759

alterations in, 476, 477

gastric cancer and, 473

reintroduction of, 107

P53 mutation, 189-190

P53 pathway, 747

P53 tumor-suppressor gene, 596, 598, 601, 719-720

Paclitaxel, 818, 819

in elderly, 165

in gastric cancer, 580-581

in recurrent head and neck cancer, 810, 813

Paclitaxel, carboplatin regimen, in esophageal cancer, 577

Paclitaxel, cisplatin, fluorouracil regimen, 578, 581

Paclitaxel, cisplatin regimen, 576

Pain, end-of-life, in cancer, 274-275

Pain medication, toxicities of, in elderly, 275

Palliative treatment, in gastric cancer, 548

Palmaris tylosis, esophageal carcinoma and, 488

Pancreatic cancer

cross-national mortality due to, 131

incidence of, by age, 207

operative treatment of, in elderly, 180-181

treatment of, and aging, 212-213

US profile of, 134

Pancreatosplenectomy, 546

Papillary adenocarcinoma, 467-468

Parotidectomy, 386

Pathologic staging, definition of, 519

Pathologist, cumulative radiation dose to, 302

Patient compliance, oral chemotherapy and, 167

PDGFR-alpha, in medulloblastoma, 668

PDK1, 96

PDK2, 96

Perifosine, 758 PET, see Positron emission tomography

PF regimen, 779-781

Pharmacokinetics, drug, and elderly, 160-162

Phosphatase and tensin homologue, deleted on chromosome 10, 96-97

Phosphocreatine, in brain tumor, 608-609

PI-3 kinase pathway, 598-599, 601

Pimonidazole, 805

PKC, 756-758

PKI-116, 601

PKI-166, 737, 740

PLAP, germ cell tumors and, 678-679

Platelet-derived growth factor, 597-598, 601, 760-761

Ploidy, 720

Plummer-Vinson-Patterson Kelly syndromes, esophageal squamous cell car-

cinoma and, 488

Point-resolved spectroscopy, 606-607

Polypharmacy, in elderly, 151

Population, elderly segment of, 128-129

Positron emission tomography, 619

CT v, 533-535

in distant metastases detection, 533-535

in esophageal cancer, 517-518, 532, 533

in esophageal cancer pretherapeutic staging, 535

in gastric cancer staging, 524

for therapy response assessment, 536-538

Power of attorney, 285

PRb pathway, 747

Prednisone, etoposide, vincristine, cyclophospahmide, doxorubicin regimen, 42-43

Prednisone, mechlorethamine, doxorubicin, vinblastine, vincristine, bleomycin, etoposide, granulocyte colony-stimulating factor regimen, 27

Prednisone, mechlorethamine, vincristine, procarbazine regimen, 27

Premalignant esophagogastric lesion

causal facts of, 500-502

detection of, 505-507

endoscopic appearance of, 503-505

epithelium plasticity and, 500-501

gastroscopy and, 505-506

histopathological classification of, 499-500, 502-503

Japanese classification and, 504

prevention of, 507-508

superficial, 503-504

surveillance of, 509-510 treatment of, 508-509

Presbyopia, in elderly, 150

Primary central nervous system lymphoma

adjuvant chemotherapy for, 687

biologic therapy for, 689

chemotherapy alone for, 688-689

chemotherapy for, 686-689

corticosteroids for, 684-685

high-dose methotrexate plus radiotherapy for, 687-688

incidence of, 684

radiotherapy for, 685-686

radiotherapy neurotoxicity and, 708-709

relapse therapy in, 689

stem cell rescue for, 689

surgery for, 685

survival following, 686

treatment outcomes in, 685

Prinomastat, 641

Procarbazine

for malignant glioma, 627

for oligodendroglioma, 649

Procarbazine, mechlorethamine, vincristine, prednisone regimen, 27

Program for All Inclusive Care for the Elderly, 290

Progression, definition of, 770

Promotion, definition of, 770

Prophylactic cranial irradiation, 704-706

neurotoxicity following, 705

Prostate cancer

chemotherapy in, 258-259

cross-national mortality due to, 131

Prostate cancer (Continued) hormonal therapy in, 257-259 incidence of, 255 localized, 255-256 radiation therapy in, 257 radical prostectomy in, of elderly, 256-257 tumor progression in, and aging, 144 US profile of, 134 watchful waiting in, of elderly, 256 Prostate cancer, radioimmunotherapy in, 73 Prostate-specific antigen, use of, 255 Proteasome, 101, 759-760 inhibition of, 108-109 Proton magnetic resonance spectroscopy, 605-606 basic principles of, 606-607 physics of, 606 spectral localization and, 606-607 PS-341, 583, 630, 641 PTCH gene, in medulloblastoma, 668-669 PTEN, 96 PTEN tumor-suppressor gene, 596, 599 PTK787, 641 Quality of life, criteria of, 827 R115777, 630, 641 RAD-001, 641 Radiation external-beam, dosage increase and, 559 for glioblastoma multiforme, 637 head and neck cancer and, 730 in recurrent glioblastoma multiforme, 640 Radiation dose, intensification of, 558-559 Radiation exposure to pathologist, 302 personnel dose of, 301 to surgical team, 298-299 to technologist, 302 Radiation therapy, in localized esophageal cancer, 555 Radioactive specimen, handling of, 301-302 Radiocolloid low v high dose, 389 for lymphatic mapping, 319-320 selecting appropriate, 339-340 Radiocolloid technique, 318, 326 Radioenhancement, in head and neck cancer, 786-787 Radioimmunoconjugate, 69 Radioimmunotherapy approaches to, 69-70 in breast cancer, 72-73 of central nervous system, 71-72 of gastrointestinal system, 72 in hematologic malignancies, 73 in Hodgkin's disease, 74-75 in leukemia, 75 in multiple myeloma, 75 in non-Hodgkin's lymphoma, 73-74 in ovarian cancer, 72 in prostate cancer, 73 in renal cancer, 73 of solid tumors, 71 Radioisotope, choice of, 70-71 Radionecrosis, 657 Radionuclide alpha-emitting, 70, 71, 77 beta-emitting, 70, 71, 77 in radioimmunotherapy, 70 Radioresistance, in head and neck cancer, 786-787 Radiosensitizer, 697-698 in head and neck cancer, 806

Radiotherapy accelerated fractionation and, 803 accelerated regimens of, 804 accelerated repopulation and, 803 acute toxicity of, 823-824 altered fractionation, 802, 804-805 in anaplastic astrocytoma, 624-625 brain tissue and, 702-704 cognitive sequelae of, 710 glioma and, 706-708 quality of life following, 828-830 repeat, 817-819 Raf, 756-757 Raltitrexed, cisplatin, epirubicin regimen, 576 Ras, 756-757 RAS family, 478-479 RAS mutation, 189-190, 483 Ras pathway, 598, 601 Ras protein, 97 RB tumor-suppressor gene, 596 Receptor tyrosine kinase, 108 in medulloblastoma, 668 Receptor tyrosine kinase neurotrophin-3 receptor, in medulloblastoma, 668 Rectal cancer, localized, in elderly, 210-211 Reduced-intensity conditioning experimental basis for, 5-6 in hematologic malignancies, 9-15 in Hodgkin's disease, 29-30 improved safety of, 9 principles of, 5 rationale for, 1-2 strategies in, 10 Reflux, prevention of, 458 Renal cell carcinoma graft-versus-tumor effect and, 49-51 incidence of, 259-260 radioimmunotherapy in, 73 tumor progression in, and aging, 144 Renal dysfunction, chemotherapy dosing and, 163 Replicative senescence, 138 Retinoblastoma, 477 Reverse-transcriptase polymerase chain reaction, 313, 324, 360, 365 Rhenium 186, 70 Rhenium 188, 70 Ringertz schema, 620 Rituximab, 84-85 Rituximab, fludarabine, cyclophosphamide regimen, 23 RNA interference, apoptosis and, 109 Rothmund-Thomson syndrome, 139 S classification, 358-359 Salty food, gastric cancer and, 456 Salvage therapy, conventional, 27-28 Sargramostim, 37 Satariano comorbidity index, 155-156 SCH66336, 641 Screening for esophageal squamous cell carcinoma, 487-490 Japanese, and premalignant esophagogastric lesions, 505 Seattle protocol, 507

Self-neglect, 292

Sentinel lymph node

naming of, 375

in breast cancer, 345 definition of, 324, 339

processing of, 357-358

immune, and cancer, 142 replicative, 138

Senescence

Sentinel lymph node (Continued)

removal of, 328

typical sites for, 355

Sentinel lymph node biopsy, 304

in breast cancer, 325

in elderly, 178

in favorable breast cancer, 322

in gastric cancer, 524

internal mammary, 321-322

intraoperative lymphatic mapping and, 385-387

in Merkel cell cancer, 391

negative, axillary recurrence rate following, 320-321

operative technique for, 354-355

for oral cavity squamous cell carcinoma, 387-390

in thyroid cancer, 390-391

Sentinel lymph node concept

in esophageal cancer, 410

in gastric cancer, 412

Sentinel lymph node dissection, clinical implications of, 428-429

Sentinel lymph node lymphoscintigraphy, patient effective dose in, 298-299

Sentinel lymph node mapping

as breast cancer standard, 325

breast implants and, 329

clinical applications of, 410-413

discordant rates for, 387

for ductal carcinoma-in-situ, 329

false-negative rate of, 325-326

in gastric cancer, 411-412

for invasive breast cancer, 318-319

intraoperative, 385-387

learning curve for, 335

melanoma and, 333-334

in Merkel cell cancer, 391

neoadjuvant chemotherapy and, 330-331

of head and neck, 387

previous breast reduction mammoplasty procedures and, 329-330

prophylactic mastectomy and, 329

sensitivity rates for, 383

technical pitfalls of, 378-379

in thyroid cancer, 390-391

Sentinel lymph node staging, of solid neoplasms, 404-405

Sentinel lymph node technique

in breast cancer, 298-302

learning of, 333-334

Serial-section analysis, 312-313

Shine through, 319-320, 363

Siewert classification, 444-445

of gastroesophageal junction adenocarcinoma, 515

Signal transducers and activators of transcription, 735

Signet ring cell carcinoma, 467-468

Similar to Mothers Against Decapentaplegic complex, 478

Single-voxel spectroscopy, 606-607

SIOP CNS germ cell tumor 96 trial, 682

Skip metastasis, in upper gastrointestinal cancer, 409

Small cell lung cancer, 224

in esophagus, 471

extensive-disease, treatment of, 225-227

limited-disease, treatment of, 224-225

prophylactic cranial irradiation in, and elderly, 227

Smoking, esophageal squamous cell carcinoma and, 455, 488

SN-38, 600

Social Security Disability Insurance, 287-288

Socioeconomic status, upper gastrointestinal malignancies and, 457

Solid tumor(s)

allogeneic immunotherapy and, 48

characteristics of, and graft-versus-tumor effect, 48

nonmyeloablative stem cell transplantation and, 49, 52-53

radioimmunotherapy of, 71

Somatic mutation theory, 139-140

Spindle cell carcinoma, in esophagus, 467

Squamous cell carcinoma

of esophagus, 466-467, 487-490

of oral cavity, 387-390

variants of, in esophagus, 467

SRC protein, overexpression of, 479

St. Anne-Mayo criteria, 620

ST1571, 630

Stanford V regimen, 27

STAT3, 756-757

Stem cell transplantation

allogeneic blood, 43

with alloreactive donor lymphocytes, 6

blood v marrow for, 43

mega-dose, 62

in multiple myeloma, 38-39

Stereotactic radiosurgery

in anaplastic astrocytoma, 626

brain metastasis and, 709-710

definition of, 709

Stereotactic resection, computer-assisted, 660

Stimulated echo acquisition mode, 606-607, 608

Stimulation mapping, 661-662

Stomach

lymph node groups of, 543

resection of, 546-547

Stomach cancer

cross-national mortality due to, 131

incidence of, by age, 207

US profile of, 134

Stress-activated protein kinase, 102-103

SU5416, 630, 641

Subareolar plexus technique, 327

Subcortical pathway, identification of, 662-663

Subdermal technique, 327

Suberoylanilide hydroxamic acid, 108

Submicroscopic disease, 370

Sucrase-isomaltase, 476

Suicide, in elderly cancer patients, 276-277

Sulfur colloid, 319, 326-328

technetium, 378

Sunbelt Melanoma trial, 370-371

Supplemental Security Income, 288

Surgery

in localized esophageal cancer, 554-555

in recurrent glioblastoma multiforme, 639-640

Surrogate decision-maker, 284-285

Survival, maximum, v life expectancy, 137-138

Survivin, 99

Sweden, elderly population segment in, 129-130

T classification, 360, 416

T-cell

type I, 60-61

type II, 60-61

T-cell immunity

adoptive transfer of, 40-41

graft rejection and, 56-57

T-cell population, targeting tumor-associated antigens, 53

T-cell receptor interaction, 63

Tacrolimus, methotrexate regimen, 24

Talampanel, 630

Tamoxifen, 237-238, 240

Tarceva, 630, 737, 740

Targeted antibody therapy, 68-69

Taxane, 780-781

Taxol, 819

Technetium sulfur colloid, 378, 384

Technologist, cumulative radiation dose to, 302

Tegafur, uracil, mitomycin regimen, 579

Telomerase, 479

Telomere, 96

alternate lengthening of, 96-97

Temozolomide, 630, 645

for brain metastasis, 698

in elderly, 167-168

Teratoma, radiological findings in, 678

Testicular tumor, in elderly, 260-261

Thalidomide, 630, 641

in elderly, 168

Therapeutic lymph node dissection, 366

Thermoluminescent dosimeter, 298-299 for surgical team members, 300-301

Thoracoscopy, in esophageal cancer, 518

Three-item recall, 151

Thymic irradiation, 15

Thyroid cancer, sentinel lymph node biopsy and, 390-391

Tipifarnib, 630

Tirapazamine, 806-807

Tissue sampling, 357-358

TNM classification

of esophageal carcinoma, 514

of gastric carcinoma, 519

Tobacco

environmental, 729

head and neck cancer and, 727-728

Tobacco smoking

esophageal squamous cell carcinoma and, 455, 488

upper gastrointestinal malignancies and, 457

Tonsillar carcinoma, incidence of, 744-745

Topotecan, in elderly, 163-164

Total lymphoid irradiation, 8

Total-body irradiation

cyclophosphamide regimen, 8

low-dose, 34

Toxin conjugate, synthesis of, 739

TP53, 500, 503

mutations in, 447

TP53 gene, 97-98

TP63, 501

Tracer, 377-378

TRAIL, apoptosis and, 105-106

Transforming growth factor, 760-761

Transforming growth factor-alpha, 478

Transforming growth factor-beta 1, 478

Treatment preferences, of elderly, 278

Trichostatin-A, 108

Tubular adenocarcinoma, 467-468

Tumor marker, esophageal squamous cell carcinoma and, 489

Tumor necrosis factor, 60, 760-761

Tumor ulceration, 416-417

Tumor-associated antigen, T-cell population targeting, 53

Tumor-suppressor gene, 596

Two-CDA, dosing of, in renal dysfunction, 163

Tylosis esophageal cancer gene locus, 480-482

Tylosis palmaris, esophageal squamous cell carcinoma and, 490

Tyrosinase reverse-transcriptase polymerase chain reaction, 360-361

UCN-01, 758

Ulceration, of tumor, 416-417

United Kingdom, elderly population segment in, 129-130

United States

aging profile in, 132

cancer profile in, 132-133

elderly population segment in, 129-130

Uracil, tegafur, mitomycin regimen, 579

Urinary bladder cancer, US profile of, 134

Urinary incontinence, in elderly, 150

Vaccine

donor tumor-antigen, 39

idiotype, 38, 40-41

Vascular endothelial growth factor, 583, 599, 601, 760-761

Vegetables, upper gastrointestinal malignancies and, 457

Velcade, 583, 630

Veno-occlusive disease, 12

Verrucous carcinoma, in esophagus, 467

Veto mechanism, 63

Vienna classification, 502-503

revised version of, 502

Villin, 476-477

Vinblastine, carboplatin regimen, in esophageal cancer, 577

Vinblastine, mechlorethamine, doxorubicin, vincristine, bleomycin, etoposide, prednisone, granulocyte colony-stimulating factor regimen 27

Vincristine, 799

for malignant glioma, 627

for oligodendroglioma, 649

Vincristine, etoposide, prednisone, cyclophospahmide, doxorubicin regi-

men, 42-43
Vincristine, mechlorethamine, doxorubicin, vinblastine, bleomycin, etoposide, prednisone, granulocyte colony-stimulating factor regi-

Vincristine, mechlorethamine, procarbazine, prednisone regimen, 27

Vinorelbine

in elderly, 167

in recurrent head and neck cancer, 811

Vinorelbine, cisplatin regimen, 576

Vital staining, esophageal squamous cell carcinoma and, 489

Vitamin A deficiency, esophageal squamous cell carcinoma and, 488

Vulvar cancer, 398-400

WAF-1, 479

Weight loss, in elderly, 150

Welch Allyn Audioscope, 150

Werner's syndrome, 139

WHO classification, of gastric adenocarcinoma, 467-468

WHO schema, 620

Whole brain radiation therapy, 694

avoidance of, 697

Wiedermann-Tautenstrauch syndrome, 139

Window of immunosuppression, 10

World Health Organization classification

of lymphoid neoplasms, 200

of myeloid neoplasms, 186

XAF1, 99

Yttrium 90, 70

ZD1839, 737, 739-740, 601, 630, 641